

MICROCOMPUTER CROP COST AND RETURN GENERA

BUDGET AREA..... De Baca County Projected 2011.
FARM SIZE..... 30.00 ACRES
IRRIGATION TYPE..... FLOOD
NUMBER OF CROPS..... 3

VERSION 1.0

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TABLE 1. Acreage summary of De Baca County, Projected 2011.

BUDGET AREA.....	DE BACA COUNTY		
FARM SIZE.....	30 ACRES		
IRRIGATION TYPE.....	FLOOD		
NUMBER OF CROPS....	3		
WATER USE			
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	3.00 *	0	0
ALFALFA	10.00	0	0
PASTURE ESTABLISHMENT	1.00 *	0	0
PERMANENT PASTURE	20.00	0	0
TOTAL	30.00		0
ACRE FEET PER ACRE OF WATER RIGHTS			0.00

* DOUBLE-CROPPED

TABLE 2. Basic cost information for De Baca County, Projected 2011.

Item			
Labor Wage Rate:			
Equipment operators	\$/hour		\$7.55
General & Irrigators	\$/hour		\$7.25
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)	\$/pound		\$0.71
Phosphate (P205)	\$/pound		\$0.65
Seed:			
Alfalfa	\$/pound		\$3.30
Fescue	\$/pound		\$1.90
Energy:			
Butane	\$/MCF		0.00
Diesel fuel	\$/gallon		2.95
Gasoline	\$/gallon		3.05
Electricity	cents/KwHr		9.13
Natural Gas	\$/MCF		3.75
Employee Liability Insurance	\$/\$/1,000 wages		\$20.00
Employee Benefits	percent/wages		18.00%
Labor Downtime	percent		25.00%
Financial Rates:			
Operating Capital Interest Rate	percent		7.00%
Land Interest Rate	percent		6.00%
Equipment Interest Rate	percent		7.00%
Real Interest Rate	percent		3.00%
Land Taxes	\$75.00 /acre (full value)		\$0.65
Personal Property Tax Rate	- NR - R	\$/\$/1,000 (Assessed Value)	\$26.14 \$26.42
Supervision Factors			
Field Crop-Irrigation	\$/labor hour		\$1.00
Field Crop-Equipment & General	\$/labor hour		\$0.50
Management Rate	percent		7.00%

TABLE 2a. Overhead cost information for De Baca County Projected 2011.

ITEM	CROP ENTERPRISE		LIVESTOCK ENTERPRISE		TOTAL
Electricity (Domestic & Shop)	60.50	per month	653	65.34	726.00
Telephone	48.40	per month	523	52.27	580.80
Accounting & Legal			187	0.00	186.95
Misc. Supplies & Hand Tools			436	0.00	435.60
Pickup and Auto					
miles	4840.00	Crop Ent.	2420.00	Livestock Ent.	
		@	0.50	per mile	
Insurance					
- general liability (non-employee)			186.95	0.00	186.95
- fire/theft			157.30	0.00	157.30
Property Taxes					
- non-planted land			0.00	0.00	0.00
- other than land & machinery			0.00	0.00	0.00
Building repairs and maintenance			209.75	23.31	233.06
Dues, fees, publications			102.91	11.43	114.35
Farmstead Equipment			179.69	19.97	199.65
Total			5,055	1,382	6,451
Total Per Planted Acre					168.51

TABLE 5. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 30 acre farm with above average management, De Baca County Projected 2011.
Planting dates: September 1 - October 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL				
<u>PURCHASED INPUTS</u>								
SEED	3.30	17.00 LBS	56.10	56.10				
NITROGEN (N)	0.71	0.00 LBS	0.00	0.00				
PHOSPHATE (P2O5)	0.65	0.00 LBS	0.00	0.00				
CANAL WATER		12.00 AC. IN.						
SUBTOTAL			56.10	56.10				
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	40 HP	0.31 HR		2.34	0.64	1.20	57.47	61.65
PLOW (BORROWED)	40 HP	1.31 HR		9.89	2.72	1.41	54.26	68.28
DISC (1X)	40 HP	0.31 HR		2.34	0.64	1.20	57.47	61.65
BORDER DISC	40 HP	0.05 HR		0.38	0.10	0.10	37.58	38.16
DRILL (BORROWED)	40 HP	0.41 HR		3.10	0.85	0.44	16.98	21.37
IRRIGATE (2X)		1.00 HR		7.25				7.25
SUBTOTAL		3.39 HR		25.29	4.96	4.35	223.76	258.37
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.85 HR		6.32				6.32
EMPLOYEE BENEFITS				4.55				4.55
INSURANCE			0.51					0.51
SUPERVISION AND MANAGEMENT				24.21				24.21
SUBTOTAL		0.85 HR	0.51	35.08				35.59
<u>TOTAL OPERATING EXPENSES</u>		4.24 HR	56.61	60.38	4.96	4.35	223.76	350.06

TABLE 6. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 30 acre farm with above average management, De Baca County Projected 2011.
Harvest dates: June 15 - October 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	145.00	5.00 TONS (STANDING)						725.00
GRAZING	10.00	1.00 AUM						10.00
TOTAL								735.00
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
NITROGEN (N)	0.71	35.00 LBS	58.50					58.50
PHOSPHATE (P2O5)	0.65	90.00 LBS	13.49					13.49
INSECTICIDE (CUSTOM)	13.49	1.00 ACRE	13.49					13.49
WIRE	0.61	42.85 LBS	26.14					26.14
ESTABLISHMENT: Principal		6.00 YEARS					58.34	58.34
: Interest							5.45	5.45
CANAL WATER		48.00 AC. IN.					56.00	56.00
SUBTOTAL			111.62				119.79	231.41
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (3X)		2.25 HR		16.31				16.31
SUBTOTAL		2.25 HR		16.31				16.31
OVERHEAD EXPENSES								
DOWNTIME				4.08				4.08
EMPLOYEE BENEFITS				2.94				2.94
INSURANCE							0.00	0.00
LAND TAXES							0.65	0.65
SUPERVISION AND MANAGEMENT				51.45				51.45
OTHER EXPENSES			168.51					168.51
SUBTOTAL			168.51	58.46			0.65	227.63
TOTAL OPERATING EXPENSES		2.25 HR	168.51	74.78			0.65	243.94
NET OPERATING PROFIT								491.06
INTEREST ON OPERATING CAPITAL	(168.51	@	0.07				11.80
INTEREST ON EQUIPMENT INVESTMENT								0.00
RETURN TO LAND AND RISK								479.27
BUDGET SUMMARY								
GROSS RETURN		735.00						
VARIABLE OPERATING EXPENSES	168.51							
RETURN OVER VARIABLE EXPENSES		566.49	(GROSS MARGIN)					
FIXED EXPENSES	0.65							
NET FARM INCOME		565.84	(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	74.78							
NET OPERATING PROFIT		491.06	(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	11.80							
RETURN TO LAND AND RISK								479.27

TABLE 7. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for a 30 acre farm with above average management, De Baca County Projected 2011.
Planting dates: May 1 - June 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
FESCUE SEED	1.90	17.00 LBS						32.30
NITROGEN	0.71	70.00 LBS						49.70
CANAL WATER		18.00 AC. IN.						
SUBTOTAL								82.00
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	40 HP	0.31 HR		2.34	0.64	1.20	57.47	61.65
PLOW (BORROWED)	40 HP	1.31 HR		9.89	2.72	1.41	54.26	68.28
FERTILIZE	40 HP	0.05 HR		0.38	0.10	0.19	9.27	9.94
FLOAT	40 HP	0.32 HR		2.42	0.66	0.35	70.07	73.50
BORDER DISC	40 HP	0.00 HR		0.00	0.00	0.00	0.00	0.00
DRILL (BORROWED)	40 HP	0.41 HR		3.10	0.85	0.44	16.98	21.37
IRRIGATE (3X)		2.25 HR		16.99				16.99
SUBTOTAL		4.65 HR		35.11	4.98	3.60	208.05	251.74
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.60 HR		0.15				0.15
EMPLOYEE BENEFITS				6.32				6.32
INSURANCE			0.70					0.70
SUPERVISION AND MANAGEMENT				26.81				26.81
SUBTOTAL		0.60 HR	0.70	33.28				33.98
<u>TOTAL OPERATING EXPENSES</u>		5.25 HR	82.70	68.39	4.98	3.60	208.05	367.72

TABLE 8. Permanent pasture, flood-irrigated, budgeted per acre costs and returns for a 30 acre farm with above with above average management, De Baca County Projected 2011.
Harvest dates: Year Round

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
PASTURE	12.00	10.00 AUMS						120.00	
TOTAL							120.00		
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
PHOSPHATE	0.65	34	22.10					22.10	
NITROGEN	0.71	70.00 LBS	49.70					49.70	
ESTABLISHMENT: Principal		20.00 YEARS					18.39	18.39	
: Interest							7.09	7.09	
CANAL WATER		24.00 AC. IN.					56.00	56.00	
SUBTOTAL			71.80				81.47	153.27	
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
FERTILIZE	40HP	0.05		0.38	0.10	0.19	9.27	9.94	
IRRIGATE (3X)		5.00 HR		36.25				36.25	
CLEAN DITCHES	CUSTOM		5.00					5.00	
SUBTOTAL			5.00 HR	5.00	36.63	0.10	0.19	9.27	51.19
OVERHEAD EXPENSES									
DOWNTIME				0.00				0.00	
EMPLOYEE BENEFITS				6.59				6.59	
INSURANCE			0.73					0.73	
LAND TAXES								0.65	
SUPERVISION AND MANAGEMENT				13.40				13.40	
OTHER EXPENSES			168.51					168.51	
SUBTOTAL			169.24	19.99				0.65	189.89
TOTAL OPERATING EXPENSES		5.00 HR	246.04	56.62	0.10	0.19	91.40	394.36	
NET OPERATING PROFIT								-274.36	
INTEREST ON OPERATING CAPITAL	(153.27	@	0.07				6.00	
INTEREST ON EQUIPMENT INVESTMENT								2.98	
RETURN TO LAND AND RISK								-283.33	
BUDGET SUMMARY									
GROSS RETURN		120.00							
VARIABLE OPERATING EXPENSES	246.34								
RETURN OVER VARIABLE EXPENSES		-126.34	(GROSS MARGIN)						
FIXED EXPENSES	91.40								
NET FARM INCOME		-217.74	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	56.62								
NET OPERATING PROFIT		-274.36	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	8.97								
RETURN TO LAND AND RISK								-283.33	

Table 9. Livestock Enterprise, cost and returns for a 30 acre farm with livestock as the primary enterprise, with above average management, De Baca County Projected 2011.

GROSS RETURNS						
NUMBER		\$/CWT	Sale Weight (CWT)	Total (\$)	Guideline Value (\$/Cow)	Guideline Value (\$/AU)
0.00	YEARLING HEIFERS	92.00	4.85	0.00	0.00	0.00
0.00	YEARLING STEERS	102.00	5.25	0.00	0.00	0.00
11.55	HEIFER CALVES	88.00	4.20	4435.20	147.84	119.79
14.55	STEER CALVES	1.00	4.70	70.50	2.35	1.90
0.00	BULLS	40.00	14.75	0.00	0.00	0.00
3.00	CULL COWS	34.00	8.85	902.70	30.09	24.38
429.30	MANURE	0.13	8.00	429.30	14.31	11.59
TOTAL				5837.70	194.59	157.67
PURCHASED INPUTS						
NUMBER	PURCHASED INPUTS	Unit	\$/Unit	Total	Guideline Value (\$/Cow)	Guideline Value (\$/AU)
FORAGE:						
10.00	ALFALFA	AUM	10.00	100.00	3.33	2.70
200.00	PERMANENT PASTURE	AUM	12.00	2400.00	80.00	64.82
SUBTOTAL				2500.00	83.33	67.52
LABOR, FEED, LIVESTOCK:						
0.60	PROTEIN SUPPLEMENT	TON	245.00	147.00	4.90	3.97
0.24	SALT & MINERALS	TON	200.00	48.00	1.60	1.30
93.72	HAY	TON	135.00	12652.20	421.74	341.72
0.00	GRAIN	TON	200.00	0.00	0.00	0.00
0.00	GRAIN CUBES	TON	200.00	0.00	0.00	0.00
	FUEL AND REPAIRS	ANNUAL		0.00	0.00	0.00
	VETERINARY AND MEDICINE	ANNUAL		818.85	27.30	22.12
0.00	BULLS PURCHASED	HEAD	1300.00	0.00	0.00	0.00
	LIVESTOCK TAXES	ANNUAL		5.75	0.19	0.16
	MAINTENANCE	ANNUAL		0.00	0.00	0.00
33.00	PREGNANCY TEST	HEAD	2.00	66.00	2.00	1.78
47.40	LABOR	HOUR	5.00	237.00	7.90	6.40
29.10	BEEF CHECKOFF PROGRAM	HEAD	1.00	29.10	0.97	0.79
	MISCELLANEOUS	ANNUAL		0.00	0.00	0.00
SUBTOTAL				14003.90	466.60	378.23
OVERHEAD EXPENSES						
	EMPLOYEE BENEFITS			0.00	0.00	0.00
	INSURANCE			0.00	0.00	0.00
	DEPRECIATION			522.50	17.42	14.11
	SUPERVISION AND MANAGEMENT			0.00	0.00	0.00
	OTHER EXPENSES			890.75	29.69	24.06
SUBTOTAL				1413.25	47.11	38.17
TOTAL OPERATING EXPENSES				17917.15	597.24	483.92
NET OPERATING PROFIT				-12079.45	-402.65	-326.25
CAPITAL COST						
	INTEREST ON OPERATING CAPITAL			644.57	21.49	17.41
	INTEREST ON MACHINERY AND IMPROVEMENTS			730.00	24.33	19.72
	INTEREST ON LIVESTOCK			0.00	0.00	0.00
TOTAL CAPITAL COST				1374.57	45.82	37.13
RETURN TO RISK				-13454.01	-448.47	-363.38
RATE OF RETURN ON INVESTMENT				-0.36		
BUDGET SUMMARY						
GROSS RETURN					5837.70	
VARIABLE OPERATING EXPENSES				16503.90		
RETURN OVER VARIABLE EXPENSES					-10666.20	
FIXED EXPENSES				1413.25		
NET FARM INCOME					-12079.45	
LABOR AND MANAGEMENT COST				0.00		
NET OPERATING PROFIT					-12079.45	
CAPITAL COST				1374.57		
RETURN TO LAND AND RISK					-13454.01	

TABLE 10. Summary of per acre costs and returns, 30 acre farm with above average management, De Baca County Projected 2011.

	ALFALFA ESTABLISHMENT	ALFALFA HAY -----FLOOD-----	PERMANENT PASTURE EST.	PERMANENT PASTURE
		TONS		AUMS
PRIMARY YIELD		5.00		10.00
PRIMARY PRICE		145.00		12.00
GOVERNMENT PAYMENTS		0.00		0.00
SECOND INCOME		10.00		0.00
GROSS RETURN		735.00		120.00
CASH OPERATING EXPENSES				
SEED	56.10		32.30	
FERTILIZER	0.00	71.99	49.70	71.80
CHEMICALS		13.49		
CROP INSURANCE				
OTHER PURCHASED INPUTS		26.14		
CANAL WATER		56.00		56.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	4.96	0.00	4.98	0.10
FUEL-IRRIGATION				
REPAIRS	4.35	0.00	3.60	0.19
CUSTOM CHARGES	0.00		0.00	
LAND TAXES		0.65		0.65
OTHER EXPENSES	0.51	168.51	0.70	169.24
TOTAL CASH EXPENSES	65.92	336.78	91.28	297.99
RETURN OVER CASH EXPENSES	-65.92	398.22	-91.28	-177.99
FIXED EXPENSES	223.76	-56.00	208.05	34.74
TOTAL EXPENSES	289.68	280.78	299.33	332.74
NET FARM INCOME	-289.68	454.22	-299.33	-212.74
LABOR AND MANAGEMENT COSTS	60.38	74.78	68.39	56.62
NET OPERATING PROFIT	-350.06	379.44	-367.72	-269.36
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		11.80		6.00
INTEREST ON EQUIPMENT INVESTMENT		0.00		2.98
TOTAL CAPITAL COSTS	0.00	11.80	0.00	8.97
RETURN TO LAND AND RISK	-350.06	367.64	-367.72	-278.33

Flex Computation

0.00 0.00

TABLE 11. Whole farm budget summary, De Baca County Projected 2011.

GROSS RETURNS		
ALFALFA HAY	10.00 ACRES	
CROP		7,250.00
GRAZING		100.00
PERMANENT PASTURE		
GRAZING	20.00 ACRES	
LIVESTOCK		2,400.00
GROSS RETURN		5,837.70
		15,588
CASH OPERATING EXPENSES		
FORAGE		2,500.00
LIVESTOCK FEED		14,003.90
SEED		200.60
FERTILIZER		2,205.61
CHEMICALS		134.91
CROP INSURANCE		0.00
OTHER PURCHASED INPUTS		261.39
CANAL WATER		1,680.00
FUEL, OIL & LUBRICANTS-EQUIPMENT		21.92
FUEL-IRRIGATION		0.00
REPAIRS		20.53
CUSTOM CHARGES		0.00
LAND TAXES		19.61
OTHER EXPENSES		5,072.13
		26,121
RETURN OVER CASH EXPENSES		-10,532.89
FIXED EXPENSES		1,014.22
		27,134.81
NET FARM INCOME		-11,547.11
LABOR AND MANAGEMENT COSTS		2,129.70
NET OPERATING PROFIT		-13,676.81
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		237.94
INTEREST ON EQUIPMENT INVESTMENT		59.52
		297
RETURN TO LAND AND RISK		-13,974.27

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
1,000 /ACRE	-14,874.27	-0.34
2,000 /ACRE	-15,774.27	-0.19
3,000 /ACRE	-16,674.27	-0.14
4,000 /ACRE	-17,574.27	-0.10
5,000 /ACRE	-18,474.27	-0.09
6,000 /ACRE	-19,374.27	-0.07
7,000 /ACRE	-20,274.27	-0.06

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)